

In the claims:

Please amend the claims as follows:

1-44. (Canceled)

1 45. (Currently Amended) A piston assembly, comprising:

a double ended member having first and second elements configured for linear motion along a common axis, at least one of the first and second elements being a piston,

a transition arm coupled to a stationary support, the transition arm including a drive arm coupled to the double ended member by a joint positioned between the first and second elements, the joint including

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an outer member configured for movement relative to the first and second elements, the outer member defining a an opening for receiving the drive arm, and

an inner member mounted within the outer member for movement relative to the outer member, the inner member defining an opening for receiving the drive arm such that the drive arm is rotatable relative to the inner member about an axis of the drive arm, and

a universal joint connecting the transition arm to the stationary support by two pins to permit pivoting motion about two axes.

1 46. (Canceled)

2 47. (Previously Presented) The piston assembly of claim 45 wherein the outer member is configured for movement relative to the first and second elements along a first axis perpendicular to the common axis.

3 48. (Previously Presented) The piston assembly of claim 47 wherein the outer member is configured for movement relative to the first and second elements along a second axis perpendicular to the first axis and the common axis.

4 49. (Previously Presented) The piston assembly of claim 47 wherein the inner member is mounted within the outer member for rotation relative to the outer member about the first axis.

50. (Previously Presented) The piston assembly of claim ~~47~~ wherein the inner member is coupled to the outer member for controlled motion along the first axis with the outer member.

51. (Canceled)

52. (Previously Presented) The piston assembly of claim ~~45~~ wherein the outer member is configured for movement relative to the first and second elements along first and second orthogonal axes perpendicular to the common axis, and the inner member is mounted within the outer member for rotation relative to the outer member about the second orthogonal axis.

53. (Canceled)

54. (Previously Presented) The piston assembly of claim ~~45~~ wherein the outer member defines first and second parallel flat sides, each flat side defining a plane perpendicular to the common axis.

55. (Previously Presented) The piston assembly of claim ~~54~~ further comprising first and second sliding members, the first sliding member for positioning between the first flat side and the first element, the second sliding member for positioning between the second flat side and the second element.

56. (Previously Presented) The piston assembly of claim ~~54~~ wherein the first and second flat sides each comprise a polished surface.

57. (Previously Presented) The piston assembly of claim ~~45~~ wherein the first and second elements each comprises a piston.

58. (Previously Presented) The piston assembly of claim ~~45~~ wherein the first element comprises a piston and the second element comprises a guided rod.

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59. (Previously Presented) The piston assembly of claim 45 wherein the drive arm defines a longitudinal axis, the joint further comprising a mount for limiting movement of the drive arm along the longitudinal axis while permitting the drive arm to rotate about its longitudinal axis.

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60. (Previously Presented) The piston assembly of claim 59 wherein the mount comprises a cap screw.

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61. (Previously Presented) The piston assembly of claim 45 wherein the opening in the inner member comprises a channel.

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62. (Previously Presented) The piston assembly of claim 45 wherein the opening in the outer member comprises a slot for accommodating movement of the drive arm when the inner member rotates relative to outer member.

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63. (Previously Presented) The piston assembly of claim 45 further comprising a thrust bearing for receiving an axial load transferred to the drive arm by the first and second elements.

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64. (Previously Presented) The piston assembly of claim 45 further comprising a sleeve bearing for receiving a normal load transferred to the drive arm by the first and second elements.

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65. (Previously Presented) The piston assembly of claim 45 further comprising a bearing located between the inner and outer members.

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66. (Previously Presented) The piston assembly of claim 45 further comprising a connector for mounting of the first and second elements thereto, the connector defining a cavity, the outer member and the inner member being positioned within the cavity.

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67. (Previously Presented) The piston assembly of claim 45 wherein the outer member is formed as a single component.

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68. (Previously Presented) The piston assembly of claim 45 further including at least two double ended members and at least two drive arms.

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[ ] 69-93. (Canceled)

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94. (New) A piston assembly, comprising:  
a double ended member having first and second elements configured for linear motion along a common axis, at least one of the first and second elements being a piston,  
a transition arm coupled to a stationary support, the transition arm including a drive arm coupled to the double ended member by a joint positioned between the first and second elements, the joint including

an outer member configured for movement relative to the first and second elements, the outer member defining a slot for receiving the drive arm, and

an inner member mounted within the outer member for movement relative to the outer member, the inner member defining an opening for receiving the drive arm, the slot accommodating movement of the drive arm when the inner member rotates relative to outer member, and

a universal joint connecting the transition arm to the stationary support by two pins to permit pivoting motion about two axes.

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95. (New) A piston assembly, comprising:

a double ended member having first and second elements configured for linear motion along a common axis, at least one of the first and second elements being a piston,

a transition arm coupled to a stationary support, the transition arm including a drive arm coupled to the double ended member by a joint positioned between the first and second elements, the joint including

an outer member configured for movement relative to the first and second elements, the outer member defining an opening for receiving the drive arm, and

an inner member mounted within the outer member for movement relative to the outer member, the inner member defining an opening for receiving the drive arm,

a universal joint connecting the transition arm to the stationary support by two pins to permit pivoting motion about two axes, and

a thrust bearing for receiving an axial load transferred to the drive arm by the first and second elements.

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96. (New) A piston assembly, comprising:

a double ended member having first and second elements configured for linear motion along a common axis, at least one of the first and second elements being a piston,

a transition arm coupled to a stationary support, the transition arm including a drive arm coupled to the double ended member by a joint positioned between the first and second elements, the joint including

an outer member configured for movement relative to the first and second elements, the outer member defining an opening for receiving the drive arm, and

an inner member mounted within the outer member for movement relative to the outer member, the inner member defining an opening for receiving the drive arm,

a universal joint connecting the transition arm to the stationary support by two pins to permit pivoting motion about two axes, and

a sleeve bearing for receiving a normal load transferred to the drive arm by the first and second elements.

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97. (New) A piston assembly, comprising:

a double ended member having first and second elements configured for linear motion along a common axis, at least one of the first and second elements being a piston,

a transition arm coupled to a stationary support, the transition arm including a drive arm coupled to the double ended member by a joint positioned between the first and second elements, the joint including

an outer member configured for movement relative to the first and second elements, the outer member defining an opening for receiving the drive arm,

an inner member mounted within the outer member for movement relative to the outer member, the inner member defining an opening for receiving the drive arm, and

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a bearing located between the inner and outer members, and  
a universal joint connecting the transition arm to the stationary support by two pins to  
permit pivoting motion about two axes.

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98. (New) A piston assembly, comprising:

a double ended member having first and second elements configured for linear motion  
along a common axis, at least one of the first and second elements being a piston,  
a transition arm coupled to a stationary support, the transition arm including a drive arm  
coupled to the double ended member by a joint positioned between the first and second elements,  
the joint including

an outer member configured for movement relative to the first and second  
elements, the outer member being formed as a single component and defining an opening for  
receiving the drive arm, and

an inner member mounted within the outer member for movement relative to the  
outer member, the inner member defining an opening for receiving the drive arm, and

a universal joint connecting the transition arm to the stationary support by two  
pins to permit pivoting motion about two axes.